

## **REMARKS/ARGUMENTS**

Claims 15 and 21 have been acknowledged as having patentable subject matter.

### **Restriction requirement**

The Applicant reasserts the arguments relating the restriction of Group I from Group II being improper. With respect to utility, Group I is generic to Group II. Group I is directed to a communication hub and its scope of utility encompasses utility as a communication hub for an adaptive TDMA system of Group II. See Claim 8 and 9 of Group I, which contrary to the Office's arguments since they include adjusting a portion of the TDMA associated with the forward and reverse channel information. Therefore, two way distinctness does not exist with respect to Groups I and II and therefore the restriction requirement should be withdrawn and Groups I and II examined.

### **Indefiniteness rejections**

The rejection of Claim 2, is improper. Claim 2 is a dependent claim, if as the claim language states that the first and second groups are not mutually exclusive, then first and second groups that are mutually exclusive are not within the scope of Claim 2. The examiners concern with an unstated consequence of the claim limitation is not germane to indefiniteness. The rejection must be withdrawn.

## Anticipation rejections

The Office incorrectly rejected Claims 1, 3, 7, 10, 11, 16, 17 and 19 as being anticipated by Dent.

Dent does not disclose each hub antenna unit is adapted for air link communication in a frequency band of the millimeter wave spectrum.

The Office has also intermixed Dents antennas 322 and antenna elements 224.

Dent specifically discloses that “a cut away of a single antenna 322 is illustrated in Fig 8. Figure 8 clearly shows the antenna 322 is comprised of several antenna elements 224.

The Office’s use of an antenna elements 224 fails to meet the features of a hub antenna unit as described in the claims. The antenna elements 224 of Dent do not have a predetermined radiation pattern as clearly demonstrated in Figures 13 and 14 of Dent. The mode in which the antenna units operate in is determinative of the pattern and thus the units do not have a predetermined radiation pattern as claimed.

Since Dent fails to disclose each and every element of Claim 1, Dent cannot anticipate Claim 1. Therefore, the rejection must be withdrawn.

In addition as Claims 3, 7, 10, 11, 16, 17 and 19 depend from Claim 1, their rejections must also be withdrawn irrespective of any additional patentable features recited therein.

## Obviousness Rejections

The Office incorrectly rejected Claims 2, 4-6 as being obvious over Dent and Campanella.

The Office incorrectly states that Campanella discloses a second group of hub antennas and cites Figure 3, L-band transmit antennas 49 as support. The Office has failed to provide a first group of hub antennas in Campanella and therefore there is no second group. Furthermore, Claim 2, recites as discussed previously “said first and second groups are not mutually exclusive”. How Campanella can provide such a teaching without disclosing a first group is illogical.

The Office also incorrectly asserts that Campanella discloses a hub is adapted to accept the coupling of a individual antenna unit. The Office has failed to provide a showing that Campanella discloses a hub, much less, a hub with the features recited in the claims.

The Office’s motivation regarding the modification of Dent is inappropriate and not linked. Dent is directed to a cellular base station providing communication with a plurality of mobile stations in a cellular communication system. To modify Dent as suggested by the Office into some sort of a global system as suggested by the Office would render Dent incapable of cellular operation as intended. Furthermore, the Office has failed to provide how such modifications as suggested would lead to providing such a global system. Even if such modification was possible, the result would not be the invention described in the claims.

Therefore, since Campanella does not provide a teaching for the elements in Claims 2 and 4, does not obviate the deficiencies of Dent with respect to Claim 1, and since the Office has failed to provided an adequate motivation to modify Dent with Campanella. The Office Action has failed to establish a prima facie case of obviousness and the rejection must be withdrawn.

Likewise Claims 5-6 depend from Claim 4 and their rejection must also be withdrawn irrespective of the additional patentable features recited therein.

The Office incorrectly rejected Claims 8 and 9 as being obvious over Dent and Anderson.

Anderson does not obviate the deficiencies of Dent with respect to Claims 1 and 7, as previously described, from which Claims 8 and 9 depend. Therefore, the combination of Dent and Anderson cannot render Claims 8 and 9 unpatentable irrespective of the additional patentable features therein.

The Office incorrectly rejected Claims 12-14 as being obvious over Dent and Web.

Web does not obviate the deficiencies of Dent with respect to Claim 1 , as previously described, from which Claims 12-14 depend. Therefore, the combination of Dent and Web cannot render Claims 12-14 unpatentable irrespective of the additional patentable features therein.

The Office incorrectly rejected Claim 18 as being obvious over Dent and Moura.

Moura does not obviate the deficiencies of Dent with respect to Claim 1 , as previously described, from which Claim 18 ultimately depends. Therefore, the

combination of Dent and Moura cannot render Claim 18 unpatentable irrespective of the additional patentable features therein.

The Office incorrectly rejected Claim 20 as being obvious over Dent and Herman.

Herman disclosure of a scanning radar sensor does not provide any teaching for a communication system using radio frequency signals embedded with information.

Herman is a disparate art. This rejection must be withdrawn.

### **CONCLUSION**

The finality of the restriction is improper.

Dent does not anticipate Claim 1 from which Claims 2-20 depend. The additional art cited, namely Campanella, Anderson, Web, Moura and Herman do not obviate the deficiencies in Dent.

The Applicant requests withdrawal of the restriction requirement, examination of Claims 22-37 and allowance of the Application including Claims 1-37.

Although an extension of time is not deemed necessary at this time, the Office is hereby authorized to charge any appropriate extension fee to Deposit Account No. 04-1679, Duane Morris LLP.

Respectfully submitted,



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